# CERTIFICATE

## By Authority Of
## THE UNITED STATES OF AMERICA
## Legally Binding Document

By the Authority Vested By Part 5 of the United States Code § 552(a) and Part 1 of the Code of Regulations § 51 the attached document has been duly INCORPORATED BY REFERENCE and shall be considered legally binding upon all citizens and residents of the United States of America. ***HEED THIS NOTICE***: Criminal penalties may apply for noncompliance.

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**Document Name:** AWPA P8: Standard for Oil-Borne Preservatives

**CFR Section(s):** 7 CFR 1728.201(i)(1)(iv)

**Standards Body:** American Wood Preservers Association

APPROVED

*Official Incorporator:*

The Executive Director
OFFICE OF THE FEDERAL REGISTER
WASHINGTON, D.C.

## AMERICAN WOOD-PRESERVERS' ASSOCIATION
## STANDARD

(This Standard is under the jurisdiction of AWPA Committee P-3)

# P8–91

# STANDARDS FOR OIL-BORNE PRESERVATIVES

## 1. PENTACHLOROPHENOL

1.1 Pentachlorophenol shall contain not less than 95 percent of chlorinated phenols as determined by titration of hydroxyl and calculated as pentachlorophenol.

1.2 It shall contain not more than 1 percent of matter insoluble in N/1 aqueous sodium hydroxide solution.

1.3 It shall have a freezing point of not less than 174°C.

1.4 The foregoing tests shall be made in accordance with the standard methods of the American Wood-Preservers' Association. (See Standard A5).

1.5 Solvents used to prepare solutions of pentachlorophenol shall comply with the standards of the American Wood-Preservers' Association (See Standard P9)

## 2. COPPER NAPHTHENATE

2.1 The naphthenic acid used in the manufacture of copper naphthenate shall be of the group of alicyclic carboxylic acids occurring in petroleum and shall have an acid number of not less than 180 and not more than 250, on an oil-free basis.

2.2 The copper naphthenate concentrate used to prepare wood-preserving solutions shall contain not less than 6 percent nor more than 8 percent copper in the form of copper naphthenate.

2.3 All of the copper present in the concentrate shall be combined as copper naphthenate.

2.4 The copper naphthenate concentrate shall not contain more than 0.5 percent water.

2.5 The foregoing tests shall be made in accordance with the standard methods of the American Wood-Preservers' Association.[1] (See Standard A5)

2.6 Solvents used to prepare solutions of copper naphthenate shall comply with the standards of the American Wood-Preservers' Association. (See Standard P9)

2.7 The copper naphthenate concentrate shall not contain more than 2% (relative) of the total copper in the concentrate as being water extractable as determined by the Analytical Method designated A-14-xx on page 248 of the 1987 AWPA Proceedings.

## 3. SOLUBILIZED COPPER-8-QUINOLINOLATE

3.1 Solubilized Copper-8-Quinolinolate shall have the following composition:

| | |
|---|---|
| Copper-8-quinolinolate, wt., min. | 10.0% |
| Nickel-2-ethylhexoate, wt., min. | 10.0% |
| Inert ingredients (hydrocarbon solvents), wt., min. | 80.0% |
| | 100.0% |
| **Physical Properties** | |
| Copper as metal, wt., min. | 1.80% |
| Nickel as metal, wt., min. | 1.80% |
| pH | 5.5–6.5 |
| Specific gravity at 77°F. | 0.935–0.975 |

Solubility—Completely soluble in aliphatic and aromatic solvents which comply with the standards of the American Wood-Preservers' Association.

3.2 Solubilized copper-8-quinolinolate should be free of amines, phosphoric acid, or naphthenic acid and its derivatives.

## 4. BIS(TRI-N-BUTYLTIN) OXIDE

4. Bis(tri-n-butyltin) oxide, commonly called TBTO[2], shall have the following composition:

4.1 TBTO shall have the following composition: Bis (tri-n-butyltin) oxide, wt. min.—95%; Tin as metal, wt. min.—38.2%; wt. max.—40.1%.

4.2 TBTO shall be a colorless to slightly yellow liquid.

4.3 The solvent employed in formulating the preservation solution shall meet the requirements of Hydrocarbon Solvent Type C, Standard P9, Par. 3.1.

## 5. ALKYL AMMONIUM COMPOUND (AAC)

5.1. Alkyl ammonium compound shall have the following composition:

| | |
|---|---|
| Didecyldimethylammonium chloride | 90% min. |
| Dialkyldimethylammonium chlorides (containing C8 or C12) | 10% max. |

5.2. The liquid concentrate shall be made up in lower (<C4) alcohols and/or water such that the active ingredient is freely soluble in water.

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[1] Methods are being prepared for determining conformity with pars. 2.1 and 2.3.

[2] Trademark M&T Chemical Co.

The commercial preservative shall be labeled as to its total content of active ingredients listed in the first paragraph.

## 6. 4,5-DICHLOR-2-N-OCTYL-4-ISOTHIAZOLIN-3-ONE

6.1 Composition of:

| | |
|---|---|
| 4,5-dichlor-2-n-octyl-4-isothiazolin-3-one | 98% |
| related non-volatile impurities | <2% |

6.2 Appearance crystalline, brown solid

6.3 Physical Properties

| | |
|---|---|
| Vapor Pressure (25 C) | 7.35 x 10-6 torr |
| Solubility in: | |
| Acetone | Approximately 40% |
| Ethanol | Approximately 35% |
| Cellosolve | Approximately 40% |
| Water | <14 ppm |
| Octanol Water partition coefficient | 6.4 |

6.4 The solvent used in formulating the preservative solution shall meet the requirements of Standard P9, Type C.

**7. 3-IODO-2-PROPYNYL BUTYL CARBAMATE (IPBC)** for non-structural, above ground use only, shall have a composition of:

7.1 IPBC shall be composed of: 3-iodo-2-propynyl butyl carbamate, wt. min. 97%, Iodine as element, wt. min. 43.4%.

7.2 IPBC shall be a white to slightly yellow crystaline solid.

7.3 Chemical purity shall be determined using Standard A5-88.